

Claims:

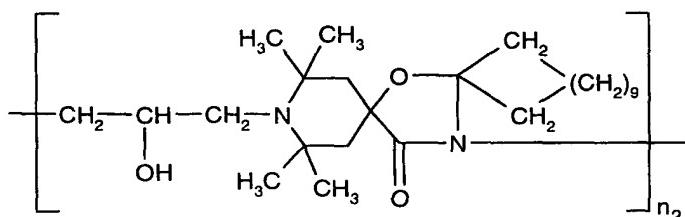
1. A stabilizer mixture containing

(I) two different sterically hindered amine compounds, and

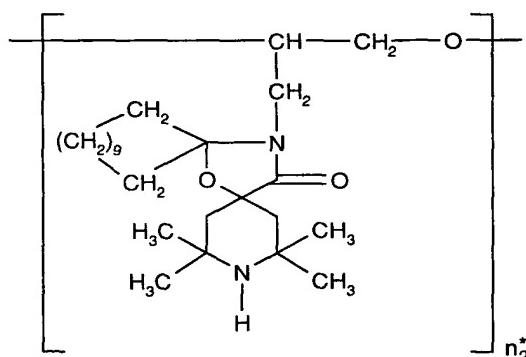
(II) at least one compound selected from the group consisting of an organic salt of Zn, an inorganic salt of Zn, Zn oxide, Zn hydroxide, an organic salt of Mg, an inorganic salt of Mg, Mg oxide and Mg hydroxide;

with the proviso that component (I) is different from the combination of the compounds

(B-8-a) and (B-8-b)



(B-8-a)

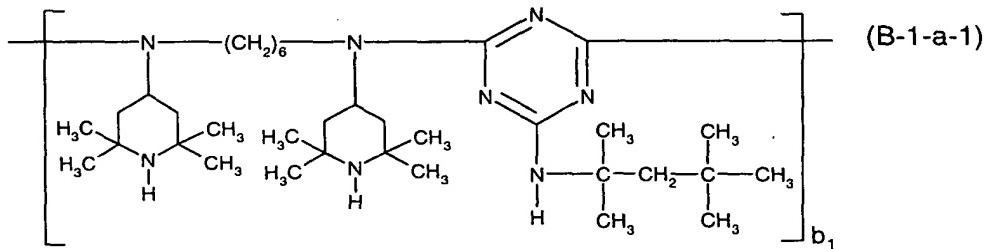


(B-8-b)

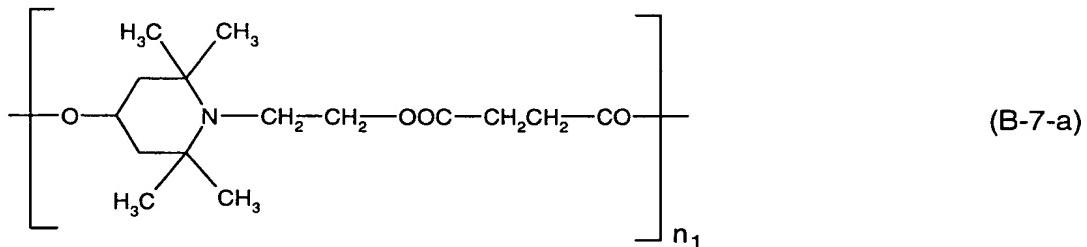
wherein  $n_2$  and  $n_2^*$  are a number from 2 to 50; and

with the proviso that, when

component (I) is the combination of the compounds (B-1-a-1) and (B-7-a);



wherein  $b_1$  is a number from 2 to 50,



wherein  $n_1$  is a number from 2 to 50; and,

at the same time, component (II) is a Zn carboxylate;

the stabilizer mixture additionally contains as a further component

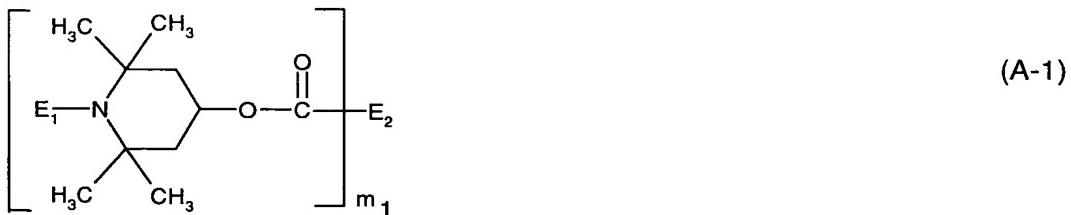
(X-1) a pigment or

(X-2) an UV absorber or

(X-3) a pigment and an UV absorber.

2. A stabilizer mixture according to claim 1 wherein the two different sterically hindered amine compounds of component (I) are selected from the group consisting of

( $\alpha$ -1) a compound of the formula (A-1)



in which

$E_1$  is hydrogen, C<sub>1</sub>-C<sub>8</sub>alkyl, O<sup>-</sup>, -OH, -CH<sub>2</sub>CN, C<sub>1</sub>-C<sub>18</sub>alkoxy, C<sub>5</sub>-C<sub>12</sub>cycloalkoxy, C<sub>3</sub>-C<sub>6</sub>alkenyl,

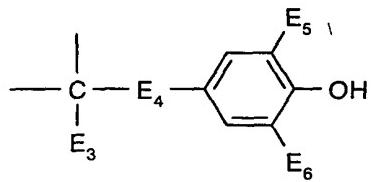
C<sub>7</sub>-C<sub>9</sub>phenylalkyl unsubstituted or substituted on the phenyl by 1, 2 or 3 C<sub>1</sub>-C<sub>4</sub>alkyl; or

C<sub>1</sub>-C<sub>8</sub>acyl,

$m_1$  is 1, 2 or 4,

if  $m_1$  is 1,  $E_2$  is C<sub>1</sub>-C<sub>25</sub>alkyl,

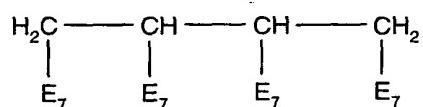
if  $m_1$  is 2,  $E_2$  is C<sub>1</sub>-C<sub>14</sub>alkylene or a group of the formula (a-I)



(a-I)

wherein  $E_3$  is  $C_1-C_{10}$ alkyl or  $C_2-C_{10}$ alkenyl,  $E_4$  is  $C_1-C_{10}$ alkylene, and  $E_5$  and  $E_6$  independently of one another are  $C_1-C_4$ alkyl, cyclohexyl or methylcyclohexyl, and if  $m_1$  is 4,  $E_2$  is  $C_4-C_{10}$ alkanetetrayl;

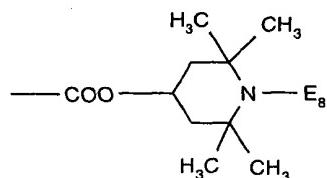
( $\alpha$ -2) a compound of the formula (A-2)



(A-2)

in which

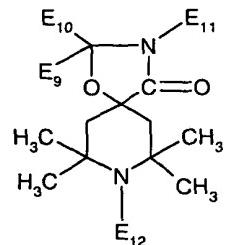
two of the radicals  $E_7$  are  $-COO-(C_1-C_{20}$ alkyl), and  
two of the radicals  $E_7$  are a group of the formula (a-II)



(a-II)

with  $E_8$  having one of the meanings of  $E_1$ ;

( $\alpha$ -3) a compound of the formula (A-3)



(A-3)

in which

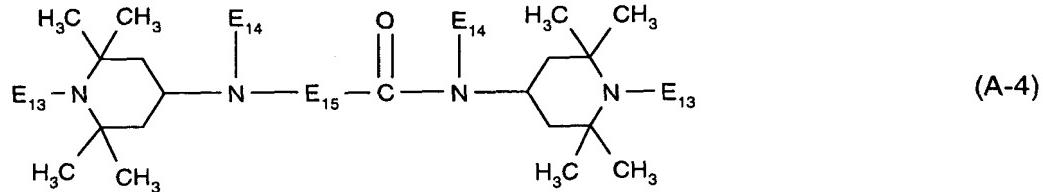
$E_9$  and  $E_{10}$  together form  $C_2-C_{14}$ alkylene,  
 $E_{11}$  is hydrogen or a group  $-Z_1-COO-Z_2$ ,

$Z_1$  is  $C_2$ - $C_{14}$ alkylene, and

$Z_2$  is  $C_1$ - $C_{24}$ alkyl, and

$E_{12}$  has one of the meanings of  $E_1$ ;

( $\alpha$ -4) a compound of the formula (A-4)



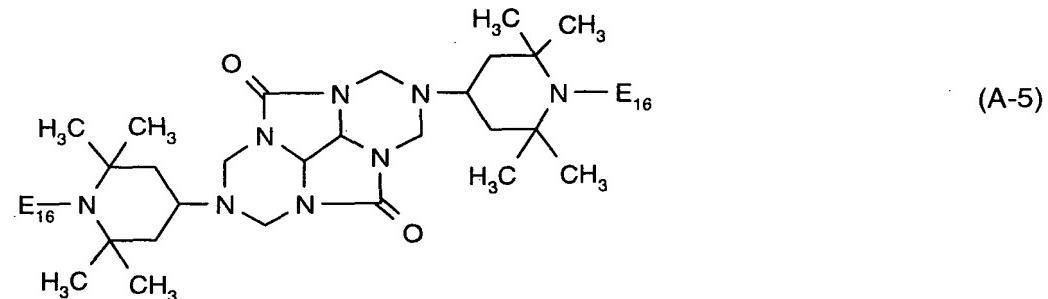
wherein

the radicals  $E_{13}$  independently of one another have one of the meanings of  $E_1$ ,

the radicals  $E_{14}$  independently of one another are hydrogen or  $C_1$ - $C_{12}$ alkyl, and

$E_{15}$  is  $C_1$ - $C_{10}$ alkylene or  $C_3$ - $C_{10}$ alkylidene;

( $\alpha$ -5) a compound of the formula (A-5)



wherein

the radicals  $E_{16}$  independently of one another have one of the meanings of  $E_1$ ;

( $\alpha$ -6) a compound of the formula (A-6)

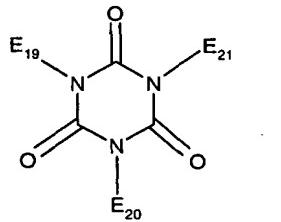


in which

$E_{17}$  is  $C_1$ - $C_{24}$ alkyl, and

$E_{18}$  has one of the meanings of  $E_1$ ;

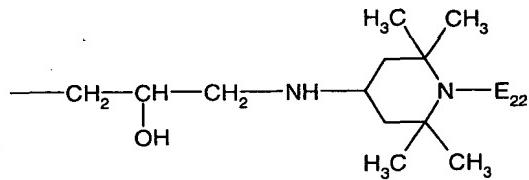
( $\alpha$ -7) a compound of the formula (A-7)



(A-7)

in which

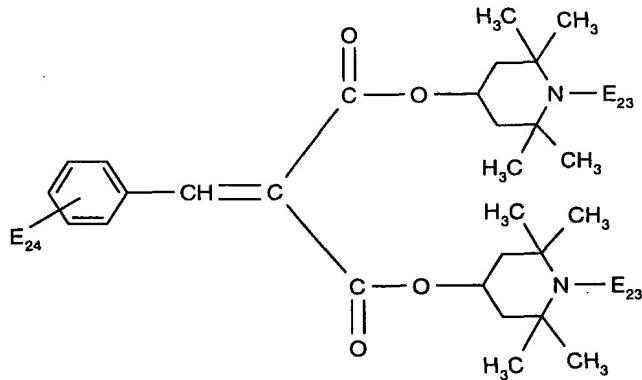
$E_{19}$ ,  $E_{20}$  and  $E_{21}$  independently of one another are a group of the formula (a-III)



(a-III)

wherein  $E_{22}$  has one of the meanings of  $E_1$ ;

( $\alpha$ -8) a compound of the formula (A-8)

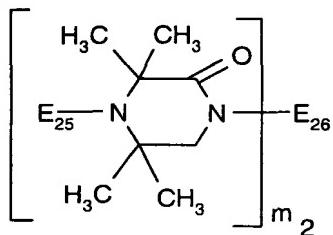


(A-8)

wherein

the radicals  $E_{23}$  independently of one another have one of the meanings of  $E_1$ ,  
and  $E_{24}$  is hydrogen,  $C_1-C_{12}$ alkyl or  $C_1-C_{12}$ alkoxy;

( $\alpha$ -9) a compound of the formula (A-9)



(A-9)

wherein

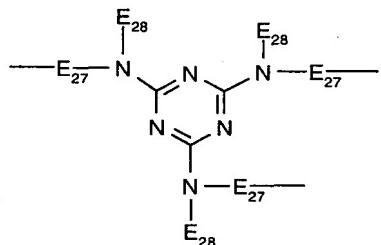
$m_2$  is 1, 2 or 3,

$E_{25}$  has one of the meanings of  $E_1$ , and

when  $m_2$  is 1,  $E_{26}$  is a group  $\text{---CH}_2\text{CH}_2\text{---NH---C}_6\text{H}_11$ ,

when  $m_2$  is 2,  $E_{26}$  is  $C_2\text{-C}_{22}\text{alkylene}$ , and

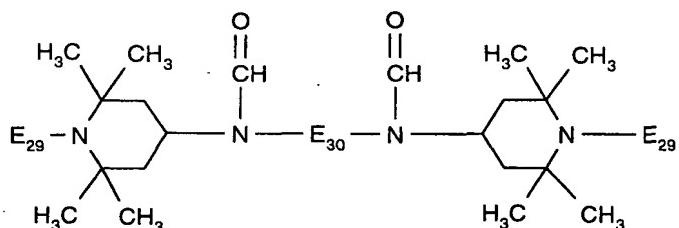
when  $m_2$  is 3,  $E_{26}$  is a group of the formula (a-IV)



(a-IV)

wherein the radicals  $E_{27}$  independently of one another are  $C_2\text{-C}_{12}\text{alkylene}$ , and  
the radicals  $E_{28}$  independently of one another are  $C_1\text{-C}_{12}\text{alkyl}$  or  $C_5\text{-C}_{12}\text{cycloalkyl}$ ;

(α-10) a compound of the formula (A-10)



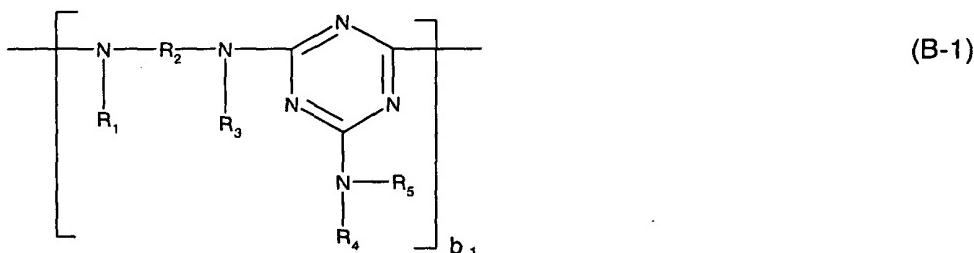
(A-10)

wherein

the radicals  $E_{29}$  independently of one another have one of the meanings of  $E_1$ , and

$E_{30}$  is  $C_2\text{-C}_{22}\text{alkylene}$ ,  $C_5\text{-C}_7\text{cycloalkylene}$ ,  $C_1\text{-C}_4\text{alkylenedi(C}_5\text{-C}_7\text{cycloalkylene)}$ , phenylene or  
phenylenedi( $C_1\text{-C}_4\text{alkylene}$ );

(β-1) a compound of the formula (B-1)



in which

R<sub>1</sub>, R<sub>3</sub>, R<sub>4</sub> and R<sub>5</sub> independently of one another are hydrogen, C<sub>1</sub>-C<sub>12</sub>alkyl, C<sub>5</sub>-C<sub>12</sub>cycloalkyl, C<sub>1</sub>-C<sub>4</sub>-alkyl-substituted C<sub>5</sub>-C<sub>12</sub>cycloalkyl, phenyl, phenyl which is substituted by -OH and/or C<sub>1</sub>-C<sub>10</sub>alkyl; C<sub>7</sub>-C<sub>9</sub>phenylalkyl, C<sub>7</sub>-C<sub>9</sub>phenylalkyl which is substituted on the phenyl radical by -OH and/or C<sub>1</sub>-C<sub>10</sub>alkyl; or a group of the formula (b-I)



R<sub>2</sub> is C<sub>2</sub>-C<sub>18</sub>alkylene, C<sub>5</sub>-C<sub>7</sub>cycloalkylene or C<sub>1</sub>-C<sub>4</sub>alkylenedi(B<sub>5</sub>-C<sub>7</sub>cycloalkylene), or

the radicals R<sub>1</sub>, R<sub>2</sub> and R<sub>3</sub>, together with the nitrogen atoms to which they are bonded, perform a 5- to 10-membered heterocyclic ring, or

R<sub>4</sub> and R<sub>5</sub>, together with the nitrogen atom to which they are bonded, form a 5- to 10-membered heterocyclic ring,

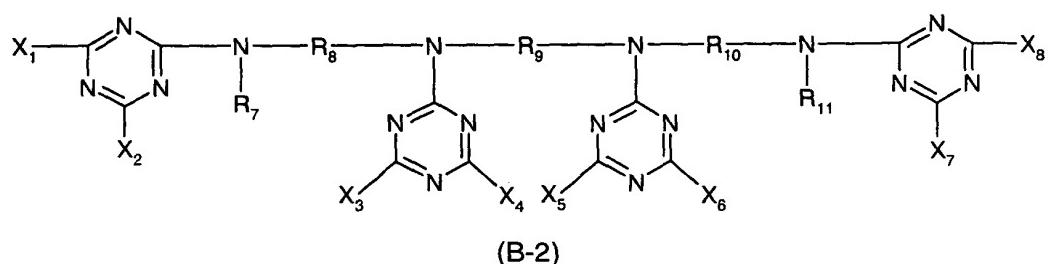
R<sub>6</sub> is hydrogen, C<sub>1</sub>-C<sub>8</sub>alkyl, O<sup>·</sup>, -OH, -CH<sub>2</sub>CN, C<sub>1</sub>-C<sub>18</sub>alkoxy, C<sub>5</sub>-C<sub>12</sub>cycloalkoxy, C<sub>3</sub>-C<sub>6</sub>alkenyl, C<sub>7</sub>-C<sub>9</sub>phenylalkyl unsubstituted or substituted on the phenyl by 1, 2 or 3 C<sub>1</sub>-C<sub>4</sub>alkyl; or C<sub>1</sub>-C<sub>6</sub>acyl, and

b<sub>1</sub> is a number from 2 to 50,

with the proviso that at least one of the radicals R<sub>1</sub>, R<sub>3</sub>, R<sub>4</sub> and R<sub>5</sub> is a group of the formula (b-I);

(β-2) a compound of the formula (B-2)

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wherein

$R_7$  and  $R_{11}$  independently of one another are hydrogen or  $C_1-C_{12}$ alkyl,

$R_8$ ,  $R_9$  and  $R_{10}$  independently of one another are  $C_2-C_{10}$ alkylene, and

$X_1$ ,  $X_2$ ,  $X_3$ ,  $X_4$ ,  $X_5$ ,  $X_6$ ,  $X_7$  and  $X_8$  independently of one another are a group of the formula (b-II),



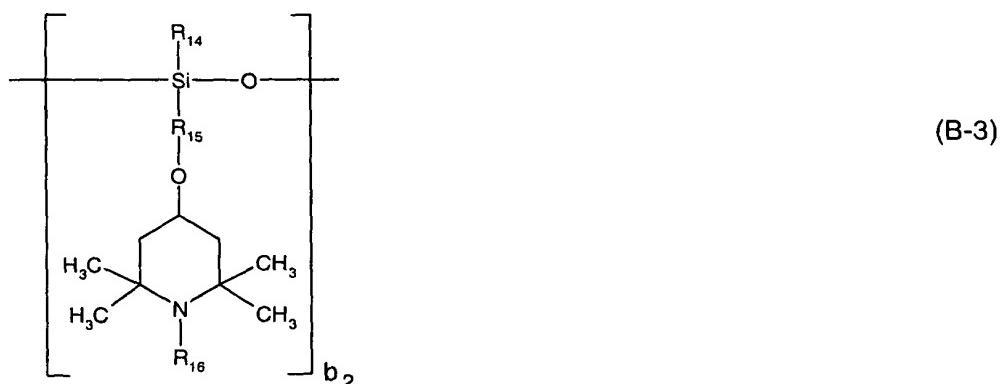
in which  $R_{12}$  is hydrogen,  $C_1-C_{12}$ alkyl,  $C_5-C_{12}$ cycloalkyl,  $C_1-C_4$ alkyl-substituted

$C_5-C_{12}$ cycloalkyl, phenyl, -OH- and/or  $C_1-C_{10}$ alkyl-substituted phenyl,  $C_7-C_9$ phenylalkyl,

$C_7-C_9$ phenylalkyl which is substituted on the phenyl radical by -OH and/or  $C_1-C_{10}$ alkyl; or a group of the formula (b-I) as defined above, and

$R_{13}$  has one of the meanings of  $R_6$ :

(β-3) a compound of the formula (B-3)



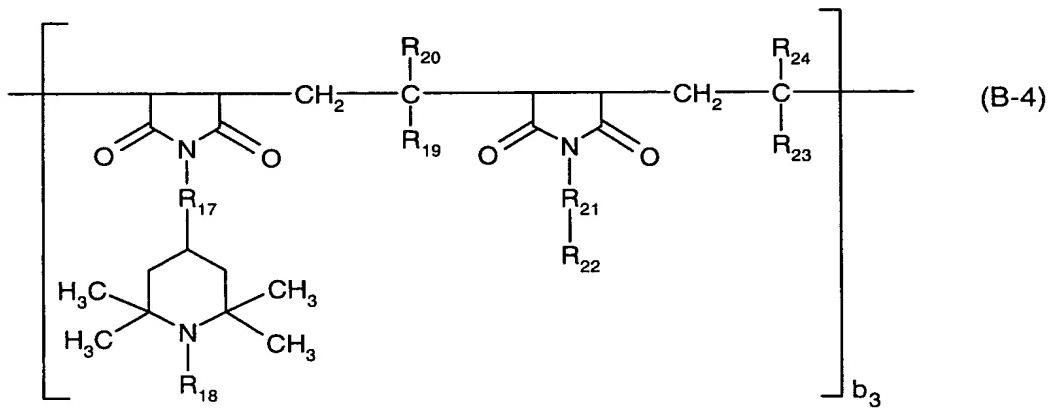
in which

$R_{14}$  is  $C_1-C_{10}$ alkyl,  $C_5-C_{12}$ cycloalkyl,  $C_1-C_4$ alkyl-substituted  $C_5-C_{12}$ cycloalkyl, phenyl or

$C_1-C_{10}$ alkyl-substituted phenyl,

$R_{15}$  is  $C_3\text{-}C_{10}$ alkylene,  
 $R_{16}$  has one of the meanings of  $R_6$ , and  
 $b_2$  is a number from 2 to 50;

( $\beta$ -4) a compound of the formula (B-4)



in which

$R_{17}$  and  $R_{21}$  independently of one another are a direct bond or a  $-N(X_9)\text{-CO-X}_{10}\text{-CO-N}(X_{11})-$  group, where  $X_9$  and  $X_{11}$  independently of one another are hydrogen,  $C_1\text{-}C_8$ alkyl,

$C_5\text{-}C_{12}$ cycloalkyl, phenyl,  $C_7\text{-}C_9$ phenylalkyl or a group of the formula (b-I),

$X_{10}$  is a direct bond or  $C_1\text{-}C_4$ alkylene,

$R_{18}$  has one of the meanings of  $R_6$ ,

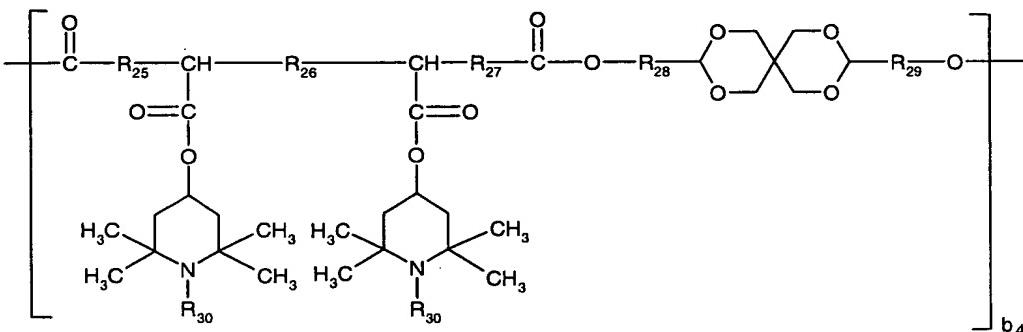
$R_{19}$ ,  $R_{20}$ ,  $R_{23}$  and  $R_{24}$  independently of one another are hydrogen,  $C_1\text{-}C_{30}$ alkyl,

$C_5\text{-}C_{12}$ cycloalkyl or phenyl,

$R_{22}$  is hydrogen,  $C_1\text{-}C_{30}$ alkyl,  $C_5\text{-}C_{12}$ cycloalkyl, phenyl,  $C_7\text{-}C_9$ phenylalkyl or a group of the formula (b-I), and

$b_3$  is a number from 1 to 50;

( $\beta$ -5) a compound of the formula (B-5)



(B-5)

in which

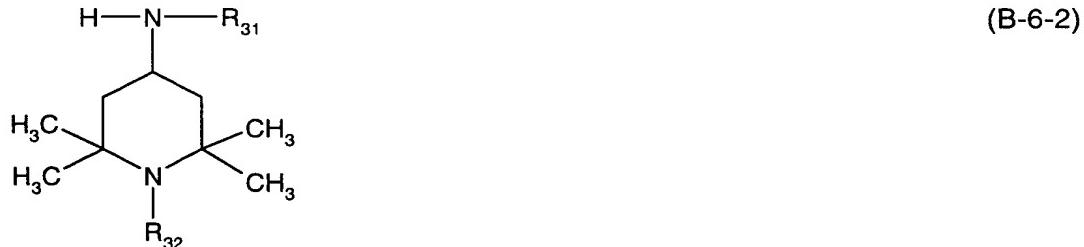
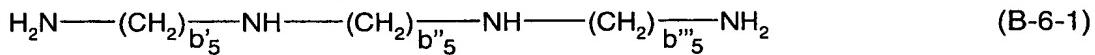
$R_{25}$ ,  $R_{26}$ ,  $R_{27}$ ,  $R_{28}$  and  $R_{29}$  independently of one another are a direct bond or

C<sub>1</sub>-C<sub>10</sub>alkylene,

$R_{30}$  has one of the meanings of  $R_6$ , and

$b_4$  is a number from 1 to 50;

(β-6) a product (B-6) obtainable by reacting a product, obtained by reaction of a polyamine of the formula (B-6-1) with cyanuric chloride, with a compound of the formula (B-6-2)



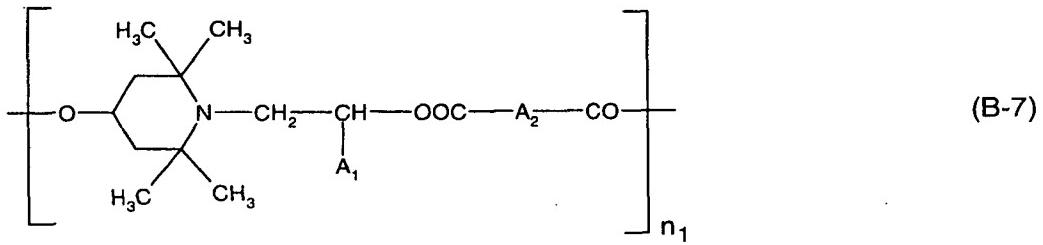
in which

$b'_5$ ,  $b''_5$  and  $b'''_5$  independently of one another are a number from 2 to 12,

$R_{31}$  is hydrogen,  $C_1$ - $C_{12}$ alkyl,  $C_5$ - $C_{12}$ cycloalkyl, phenyl or  $C_7$ - $C_9$ phenylalkyl, and

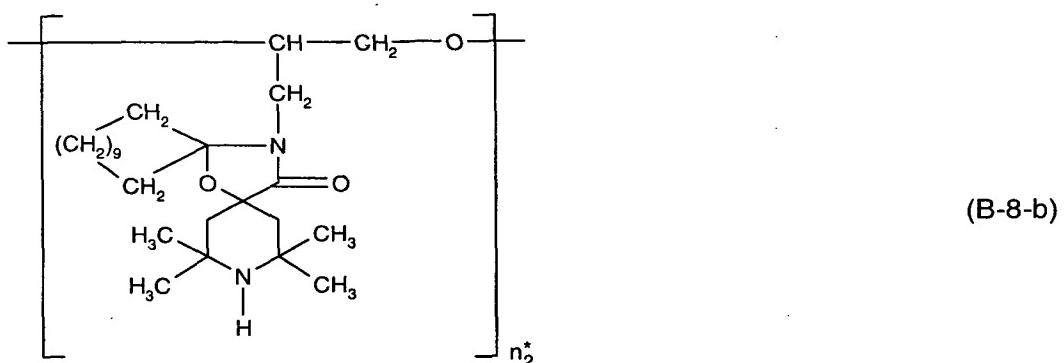
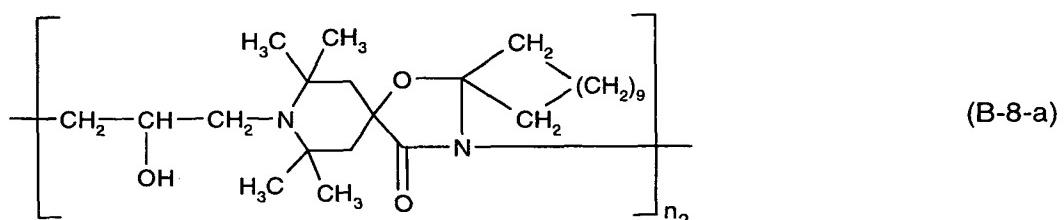
$R_{32}$  has one of the meanings of  $R_6$ ;

(β-7) a compound of the formula (B-7)



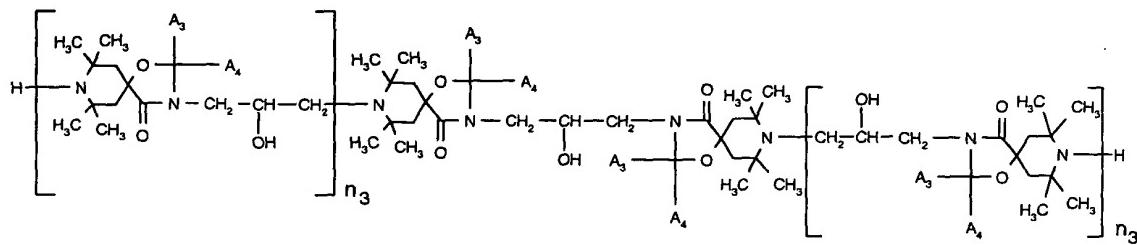
wherein  $A_1$  is hydrogen or  $C_1-C_4$ alkyl,  
 $A_2$  is a direct bond or  $C_1-C_{10}$ alkylene, and  
 $n_1$  is a number from 2 to 50;

(β-8) at least one compound of the formulae (B-8-a) and (B-8-b)



wherein  $n_2$  and  $n_2^*$  are a number from 2 to 50;

(β-9) a compound of the formula (B-9)



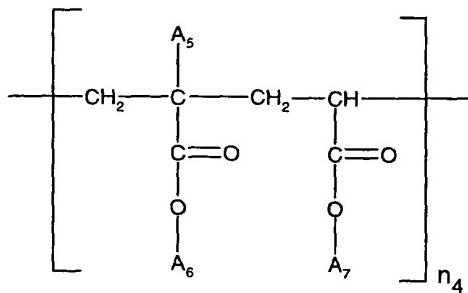
(B-9)

wherein  $A_3$  and  $A_4$  independently of one another are hydrogen or  $C_1-C_8$ alkyl, or  $A_3$  and  $A_4$

together form a  $C_2-C_{14}$ alkylene group, and

the variables  $n_3$  independently of one another are a number from 1 to 50; and

(B-10) a compound of the formula (B-10)



(B-10)

wherein  $n_4$  is a number from 2 to 50,

$A_5$  is hydrogen or  $C_1-C_4$ alkyl,

the radicals  $A_6$  and  $A_7$  independently of one another are  $C_1-C_4$ alkyl or a group of the formula (b-I),

with the proviso that at least 50 % of the radicals  $A_7$  are a group of the formula (b-I).

3. A stabilizer mixture according to claim 2, wherein

the two different sterically hindered amine compounds of component (I) are selected from the group consisting of the classes ( $\alpha$ -1), ( $\alpha$ -2), ( $\alpha$ -3), ( $\alpha$ -4), ( $\alpha$ -5), ( $\alpha$ -6), ( $\alpha$ -7), ( $\alpha$ -8), ( $\alpha$ -9) and ( $\alpha$ -10).

4. A stabilizer mixture according to claim 2, wherein

the two different sterically hindered amine compounds of component (I) are selected from the group consisting of the classes (β-1), (β-2), (β-3), (β-4), (β-5), (β-6), (β-7), (β-8), (β-9) and (β-10).

**5. A stabilizer mixture according to claim 2, wherein**

one of the two different sterically hindered amine compounds of component (I) is selected from the group consisting of the classes (α-1), (α-2), (α-3), (α-4), (α-5), (α-6), (α-7), (α-8), (α-9) and (α-10), and

the other of the two different sterically hindered amine compounds of component (I) is selected from the group consisting of the classes (β-1), (β-2), (β-3), (β-4), (β-5), (β-6), (β-7), (β-8), (β-9) and (β-10).

**6. A stabilizer mixture according to claim 2, wherein**

one of the two different sterically hindered amine compounds of component (I) is selected from the class (β-1).

**7. A stabilizer mixture according to claim 2, wherein**

one of the two different sterically hindered amine compounds of component (I) is selected from the class (β-1), and

the other of the two different sterically hindered amine compounds of component (I) is selected from the class (α-1) or (β-7).

**8. A stabilizer mixture according to claim 2, wherein**

one of the two different sterically hindered amine compounds of component (I) is selected from the class (β-7), and

the other of the two different sterically hindered amine compounds of component (I) is selected from the class (β-2).

**9. A stabilizer mixture according to claim 2, wherein**

the two different sterically hindered amine compounds of component (I) are selected from different classes.

**10. A stabilizer mixture according to claim 2, wherein**

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$m_1$  is 1, 2 or 4.

if  $m_1$  is 1,  $E_2$  is  $C_{12}$ - $C_{20}$  alkyl,

if  $m_1$  is 2,  $E_2$  is  $C_2-C_{10}$ alkylene or a group of the formula (a-l)

$E_3$  is C<sub>1</sub>-C<sub>4</sub>alkyl.

$E_4$  is  $C_1$ - $C_6$ alkylene, and

$E_5$  and  $E_6$  independently of one another are  $C_1$ - $C_4$ alkyl, and

if  $m_1$  is 4,  $E_2$  is C<sub>4</sub>-C<sub>8</sub> alkanetetracyl;

two of the radicals E<sub>7</sub> are -COO-(C<sub>10</sub>-C<sub>15</sub>alkyl), and

two of the radicals E<sub>7</sub> are a group of the formula (a-II);

$E_9$  and  $E_{10}$  together form  $C_9\text{-}C_{13}$  alkylene,

$E_{11}$  is hydrogen or a group  $-Z_1\text{-COO-}Z_2$ ,

$Z_1$  is  $C_2$ - $C_6$ alkylene, and

$Z_2$  is  $C_{10}-C_{16}$ alkyl;

$E_{14}$  is hydrogen, and

**E<sub>15</sub>** is C<sub>2</sub>-C<sub>6</sub>alkylene or C<sub>3</sub>-C<sub>5</sub>alkylidene;

E<sub>17</sub> is C<sub>10</sub>-C<sub>14</sub>alkyl;

$E_{24}$  is  $C_1$ - $C_4$ alkoxy;

$m_2$  is 1, 2 or 3,

when  $m_2$  is 1,  $E_{26}$  is a group —CH<sub>2</sub>CH<sub>2</sub>NH—C<sub>6</sub>H<sub>11</sub> ,

when  $m_2$  is 2,  $E_{26}$  is C<sub>2</sub>-C<sub>6</sub>alkylene, and

when  $m_2$  is 3,  $E_{26}$  is a group of the formula (a-IV)

the radicals  $E_{27}$  independently of one another are  $C_2$ - $C_6$ alkylene, and

the radicals  $E_{28}$  independently of one another are  $C_1$ - $C_4$ alkyl or  $C_5$ - $C_8$ cycloalkyl; and

$E_{30}$  is C<sub>2</sub>-C<sub>8</sub>alkylene;

$R_1$  and  $R_3$  independently of one another are a group of the formula (b-1),

$R_2$  is  $C_2$ - $C_8$ alkylene.

$R_4$  and  $R_5$  independently of one another are hydrogen,  $C_1\text{-}C_{12}$ alkyl,  $C_5\text{-}C_6$ cycloalkyl or a group of the formula (b-I), or the radicals  $R_4$  and  $R_5$ , together with the nitrogen atom to which they are bonded, form a 5- to 10-membered heterocyclic ring, and

$b_1$  is a number from 2 to 25:

R<sub>7</sub> and R<sub>11</sub> independently of one another are hydrogen or C<sub>1</sub>-C<sub>4</sub>alkyl.

R<sub>8</sub>, R<sub>9</sub> and R<sub>10</sub> independently of one another are C<sub>2</sub>-C<sub>4</sub>alkylene, and

$X_1, X_2, X_3, X_4, X_5, X_6, X_7$  and  $X_8$  independently of one another are a group of the formula

(b-II),

R<sub>12</sub> is hydrogen, C<sub>1</sub>-C<sub>4</sub>alkyl, C<sub>5</sub>-C<sub>8</sub>cycloalkyl or a group of the formula (b-I);

R<sub>14</sub> is C<sub>1</sub>-C<sub>4</sub>alkyl,

R<sub>15</sub> is C<sub>3</sub>-C<sub>6</sub>alkylene, and

b<sub>2</sub> is a number from 2 to 25;

R<sub>17</sub> and R<sub>21</sub> independently of one another are a direct bond or a group

-N(X<sub>9</sub>)-CO-X<sub>10</sub>-CO-N(X<sub>11</sub>)-,

X<sub>9</sub> and X<sub>11</sub> independently of one another are hydrogen or C<sub>1</sub>-C<sub>4</sub>alkyl,

X<sub>10</sub> is a direct bond,

R<sub>19</sub> and R<sub>23</sub> are C<sub>1</sub>-C<sub>25</sub>alkyl or phenyl,

R<sub>20</sub> and R<sub>24</sub> are hydrogen or C<sub>1</sub>-C<sub>4</sub>alkyl,

R<sub>22</sub> is C<sub>1</sub>-C<sub>25</sub>alkyl or a group of the formula (b-I), and

b<sub>3</sub> is a number from 1 to 25;

R<sub>25</sub>, R<sub>26</sub>, R<sub>27</sub>, R<sub>28</sub> and R<sub>29</sub> independently of one another are a direct bond or

C<sub>1</sub>-C<sub>4</sub>alkylene, and

b<sub>4</sub> is a number from 1 to 25;

b'<sub>5</sub>, b"<sub>5</sub> and b'"<sub>5</sub> independently of one another are a number from 2 to 4, and

R<sub>31</sub> is hydrogen, C<sub>1</sub>-C<sub>4</sub>alkyl, C<sub>5</sub>-C<sub>8</sub>cycloalkyl, phenyl or benzyl;

A<sub>1</sub> is hydrogen or methyl,

A<sub>2</sub> is a direct bond or C<sub>2</sub>-C<sub>6</sub>alkylene, and

n<sub>1</sub> is a number from 2 to 25;

n<sub>2</sub> and n<sub>2</sub>\* are a number from 2 to 25;

A<sub>3</sub> and A<sub>4</sub> independently of one another are hydrogen or C<sub>1</sub>-C<sub>4</sub>alkyl, or A<sub>3</sub> and A<sub>4</sub> together form a C<sub>9</sub>-C<sub>13</sub>alkylene group, and

the variables n<sub>3</sub> independently of one another are a number from 1 to 25;

n<sub>4</sub> is a number from 2 to 25,

A<sub>5</sub> and A<sub>6</sub> independently of one another are C<sub>1</sub>-C<sub>4</sub>alkyl, and

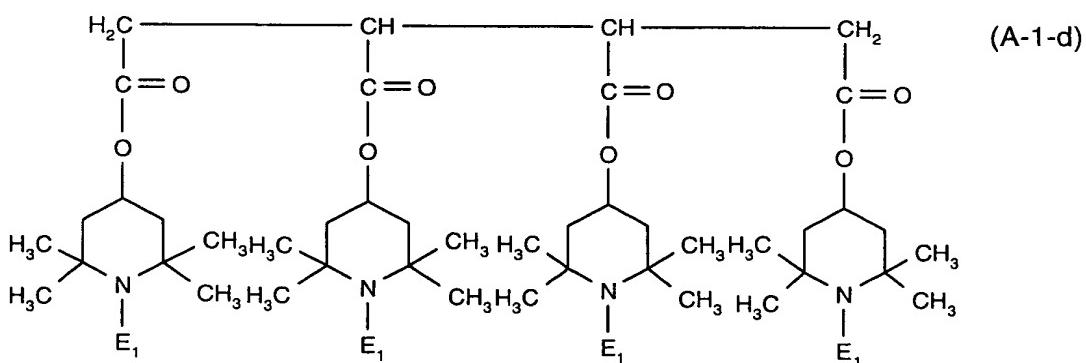
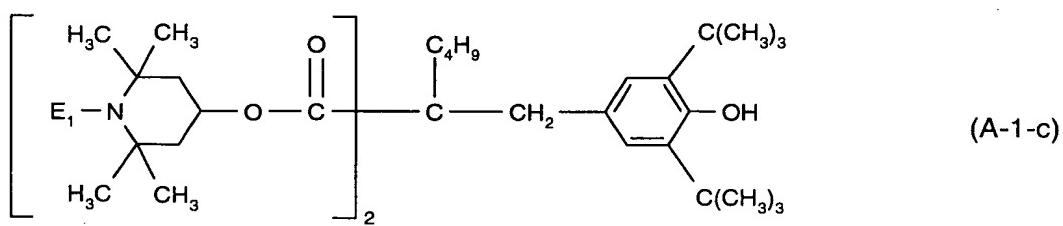
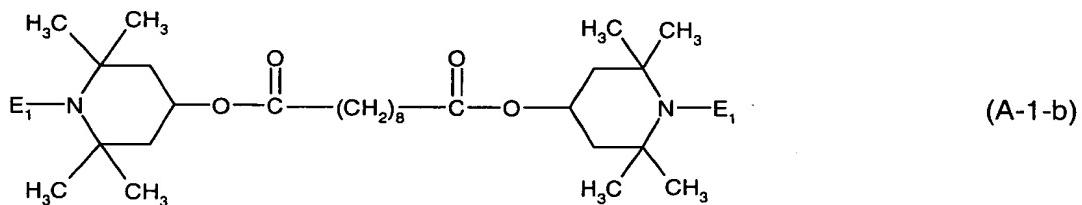
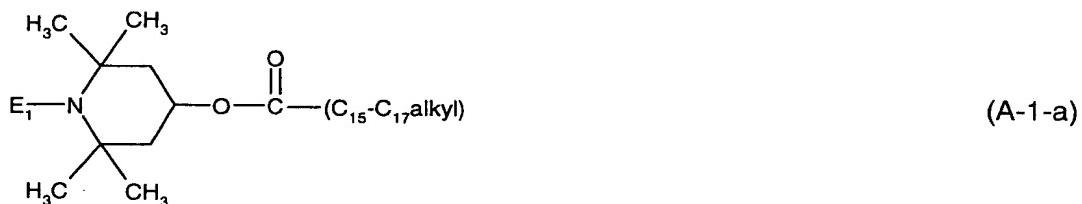
A<sub>7</sub> is C<sub>1</sub>-C<sub>4</sub>alkyl or a group of the formula (b-I)

with the proviso that at least 50 % of the radicals A<sub>7</sub> are a group of the formula (b-I).

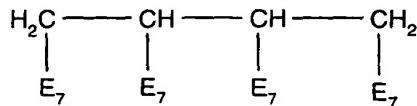
**11. A stabilizer mixture according to claim 1, wherein**

the two different sterically hindered amine compounds of component (I) are selected from the group consisting of the compounds of the formulae (A-1-a), (A-1-b), (A-1-c), (A-1-d),

(A-2-a), (A-3-a), (A-3-b), (A-4-a), (A-4-b), (A-5), (A-6-a), (A-7), (A-8-a), (A-9-a), (A-9-b), (A-9-c), (A-10-a), (B-1-a), (B-1-b), (B-1-c), (B-1-d), (B-2-a), (B-3-a), (B-4-a), (B-4-b) and (B-4-c), a product (B-6-a) and the compounds of the formulae (B-7-a), (B-8-a), (B-8-b), (B-9-a) and (B-10-a);



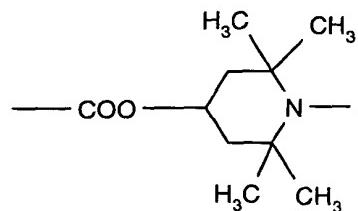
wherein E<sub>1</sub> is hydrogen, C<sub>1</sub>-C<sub>8</sub>alkyl, O<sup>-</sup>, -OH, -CH<sub>2</sub>CN, C<sub>1</sub>-C<sub>18</sub>alkoxy, C<sub>5</sub>-C<sub>12</sub>cycloalkoxy, C<sub>3</sub>-C<sub>6</sub>alkenyl, C<sub>7</sub>-C<sub>9</sub>phenylalkyl unsubstituted or substituted on the phenyl by 1, 2 or 3 C<sub>1</sub>-C<sub>4</sub>alkyl; or C<sub>1</sub>-C<sub>8</sub>acyl;



(A-2-a)

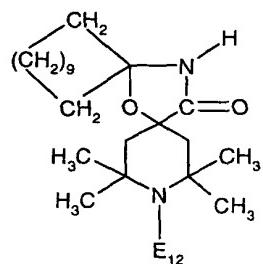
in which two of the radicals  $\text{E}_7$  are  $-\text{COO-C}_{13}\text{H}_{27}$  and

two of the radicals  $\text{E}_7$  are

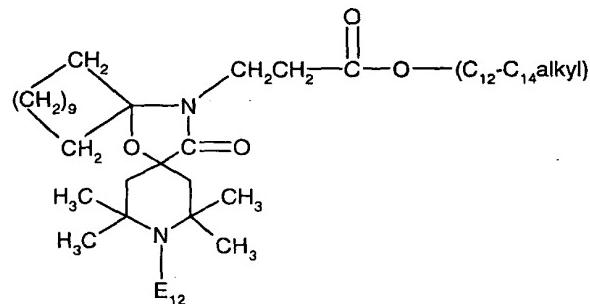


and  $\text{E}_8$  has one of the meanings

of  $\text{E}_1$ :

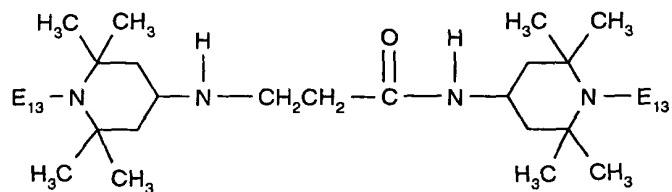


(A-3-a)

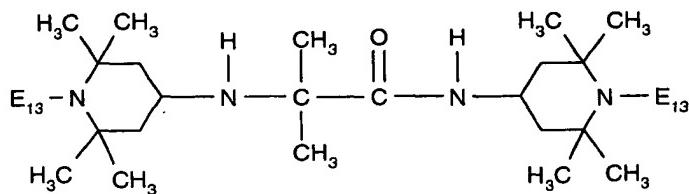


(A-3-b)

wherein  $\text{E}_{12}$  has one of the meanings of  $\text{E}_1$ :

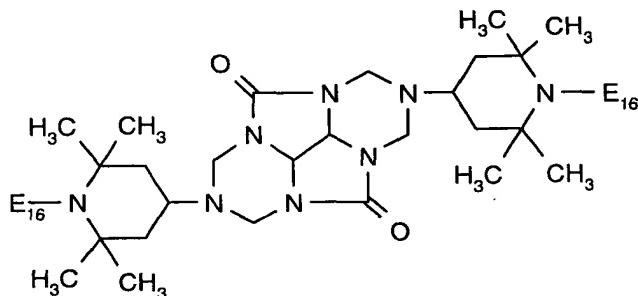


(A-4-a)



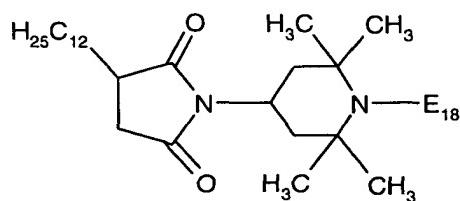
(A-4-b)

wherein  $E_{13}$  has one of the meanings of  $E_1$ ;



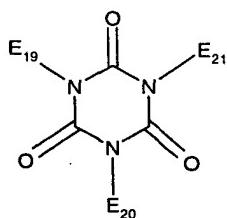
(A-5)

wherein  $E_{16}$  has one of the meanings of  $E_1$ ;



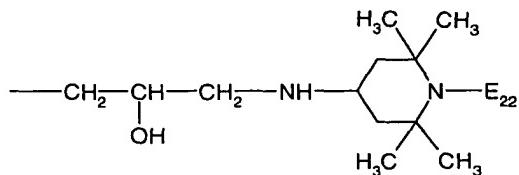
(A-6-a)

wherein  $E_{18}$  has one of the meanings of  $E_1$ ;



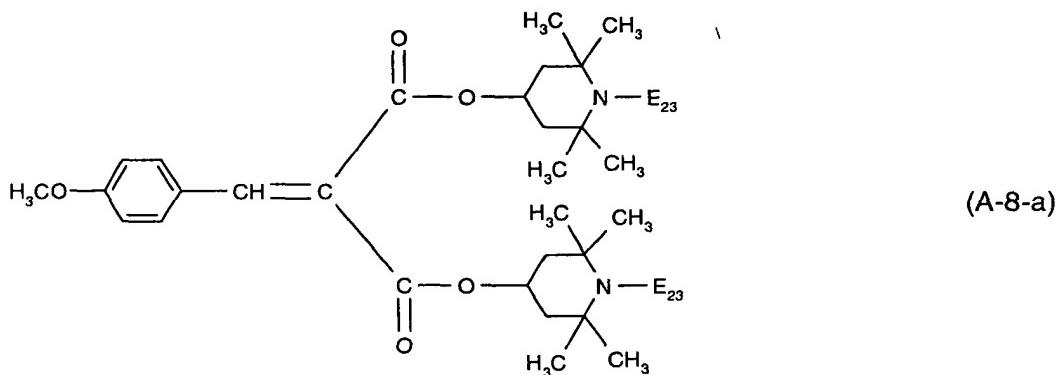
(A-7)

in which  $E_{19}$ ,  $E_{20}$  and  $E_{21}$  independently of one another are a group of the formula (a-III)

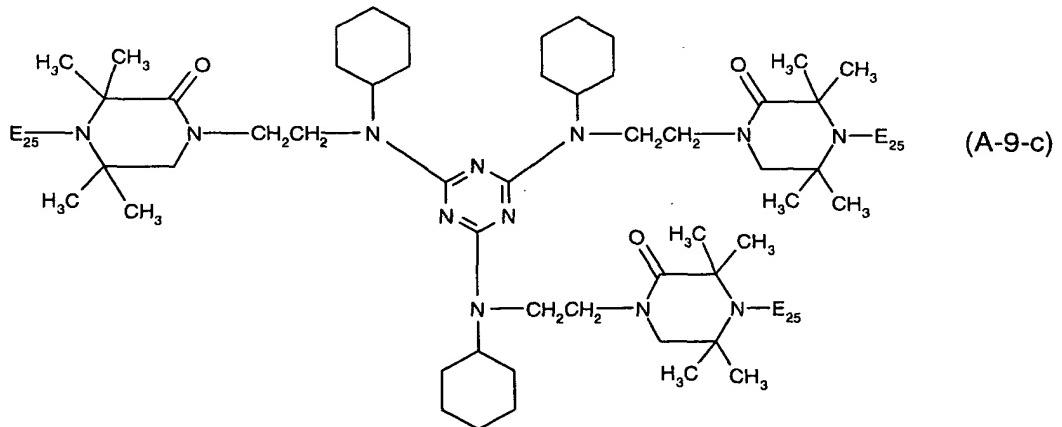
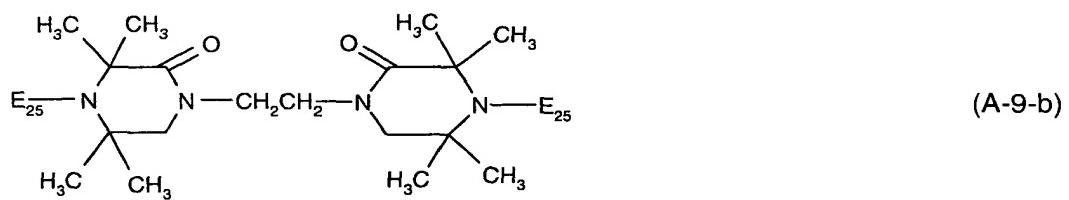
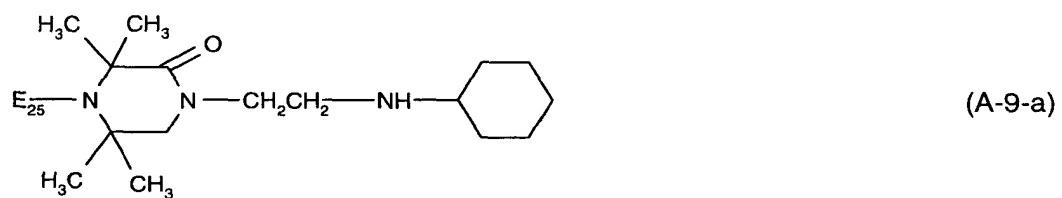


(a-III)

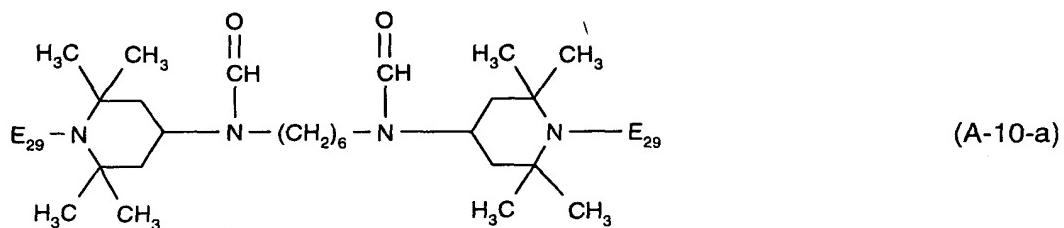
wherein  $E_{22}$  has one of the meanings of  $E_1$ ;



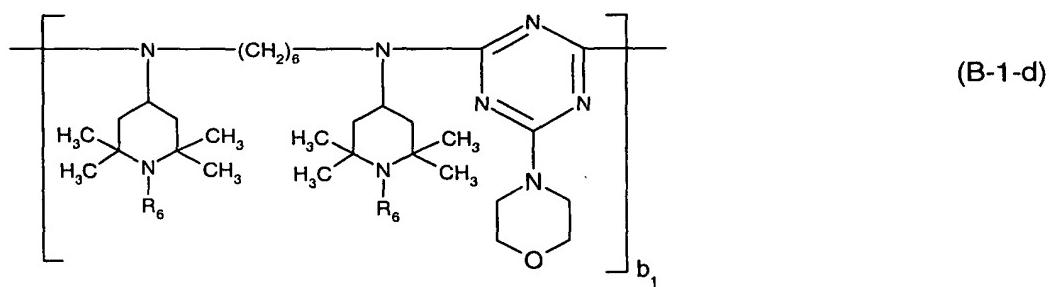
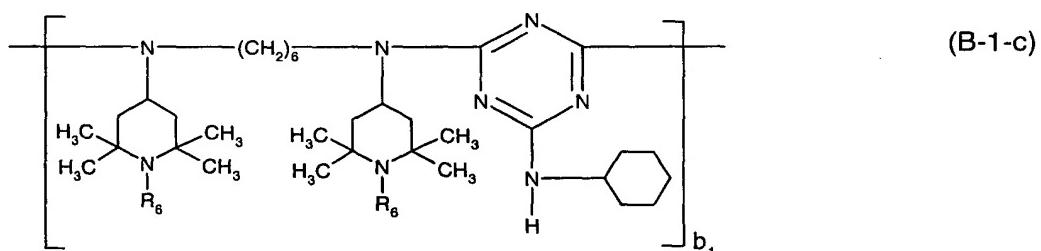
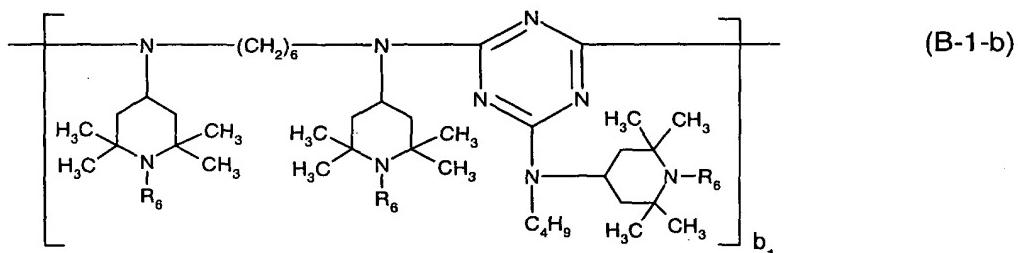
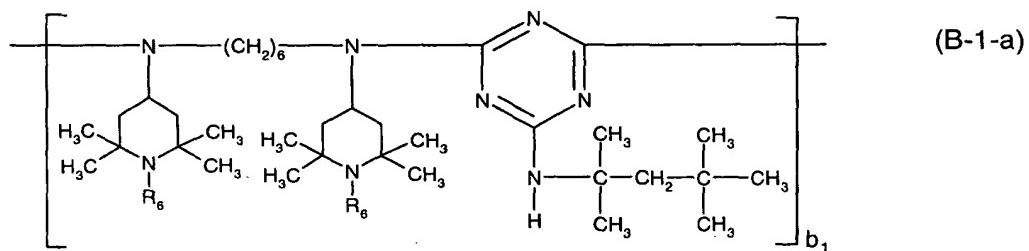
wherein  $E_{23}$  has one of the meanings of  $E_1$ :



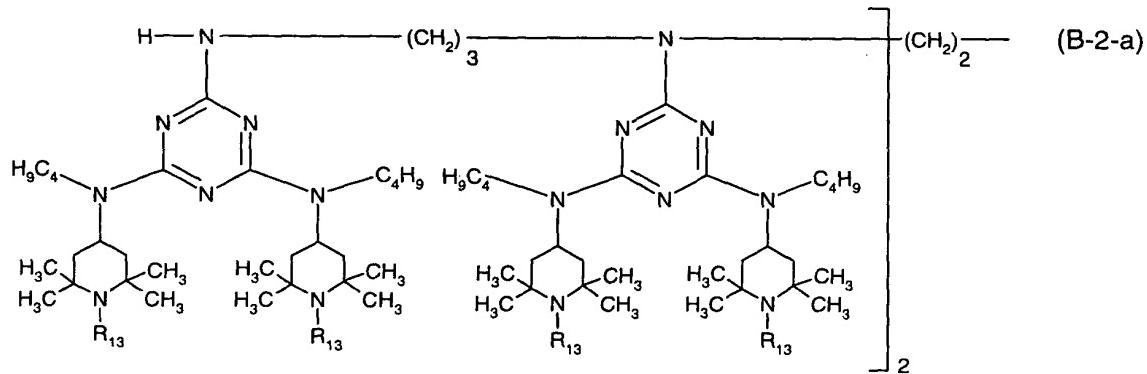
wherein  $E_{25}$  has one of the meanings of  $E_1$ ;



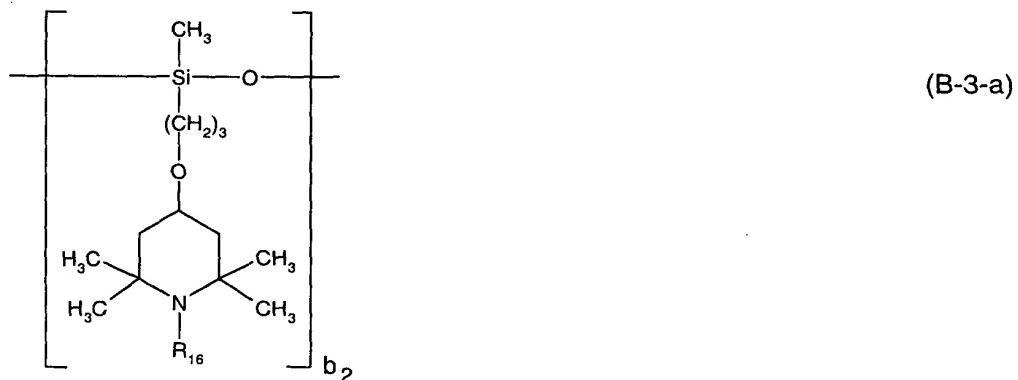
wherein  $E_{29}$  has one of the meanings of  $E_1$ :



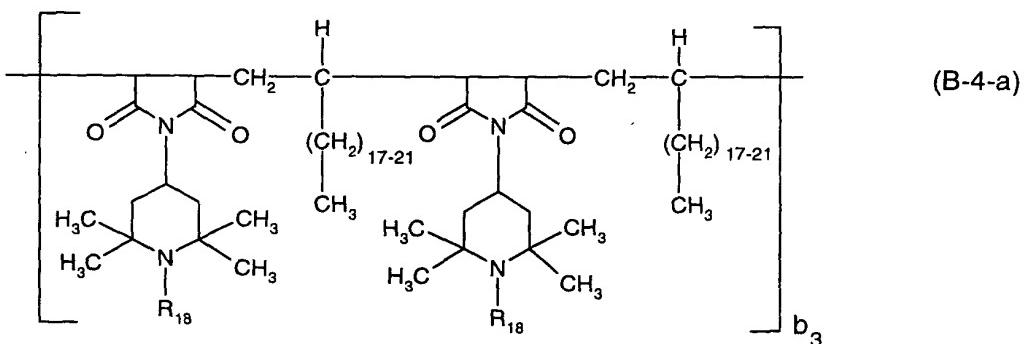
wherein  $b_1$  is a number from 2 to 20 and  $R_6$  is hydrogen,  $C_1\text{-}C_8$ alkyl,  $O^\cdot$ ,  $-\text{OH}$ ,  $-\text{CH}_2\text{CN}$ ,  $C_1\text{-}C_{18}$ alkoxy,  $C_5\text{-}C_{12}$ cycloalkoxy,  $C_3\text{-}C_6$ alkenyl,  $C_7\text{-}C_9$ phenylalkyl unsubstituted or substituted on the phenyl by 1, 2 or 3  $C_1\text{-}C_4$ alkyl; or  $C_1\text{-}C_8$ acyl;

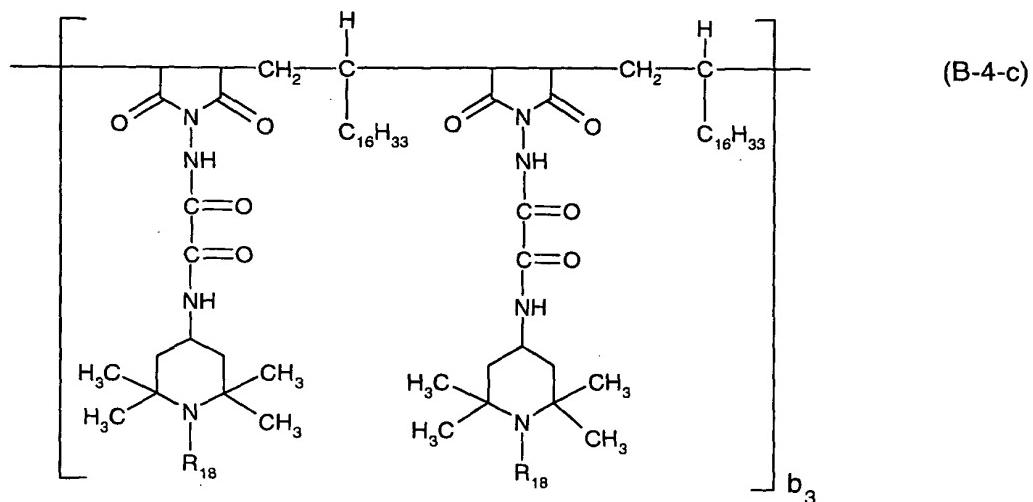
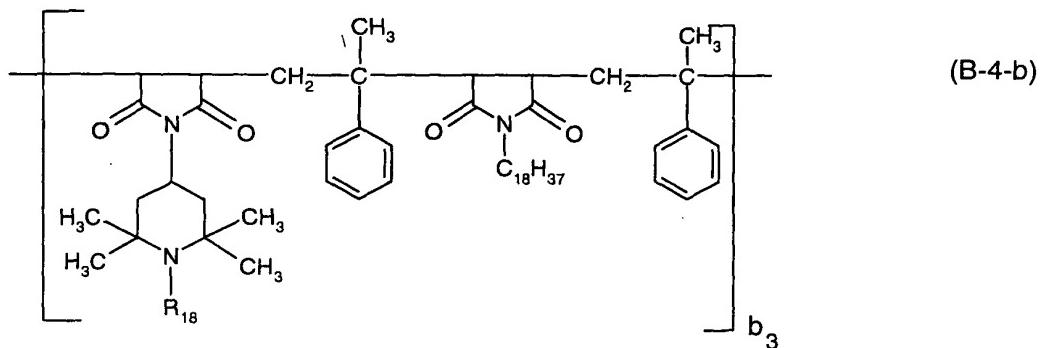


wherein  $R_{13}$  has one of the meanings of  $R_6$ ,

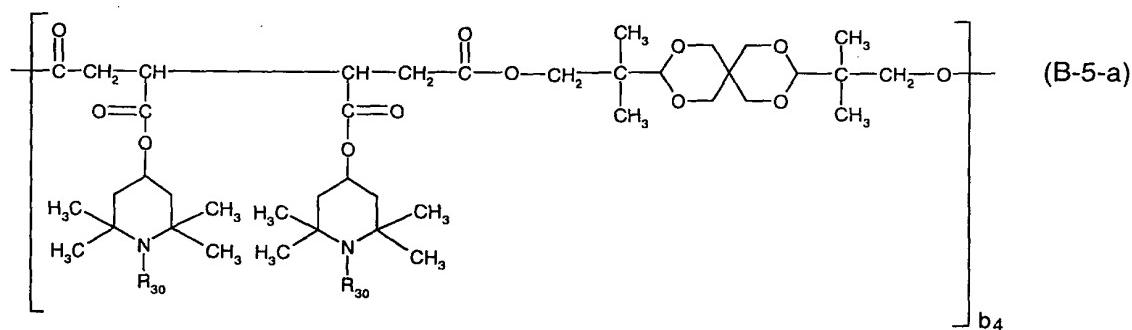


wherein  $b_2$  is a number from 2 to 20 and  $R_{16}$  has one of the meanings of  $R_6$ ;





wherein  $b_3$  is a number from 1 to 20 and  $R_{18}$  has one of the meanings of  $R_6$ ;

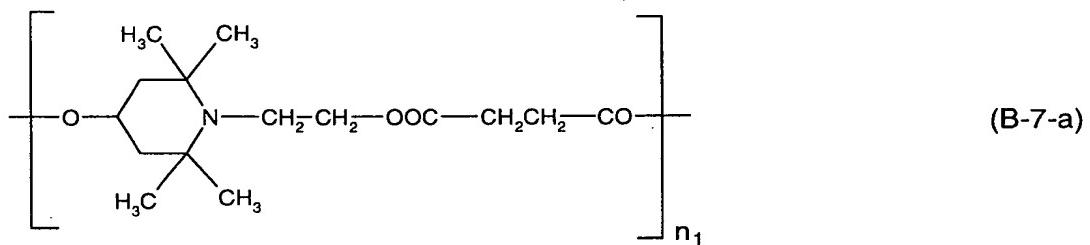


wherein  $b_4$  is a number from 1 to 20 and  $R_{30}$  has one of the meanings of  $R_6$ ;

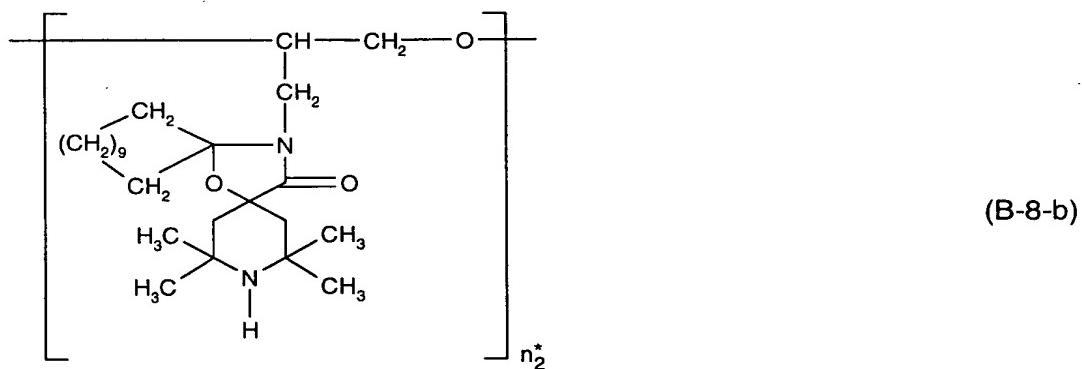
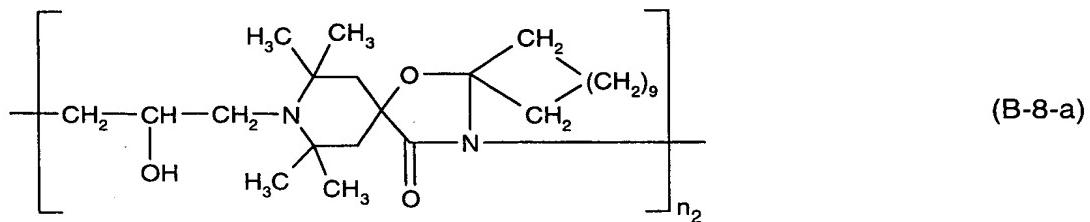
a product (B-6-a) obtainable by reacting a product, obtained by reaction of a polyamine of the formula (B-6-1-a) with cyanuric chloride, with a compound of the formula (B-6-2-a)



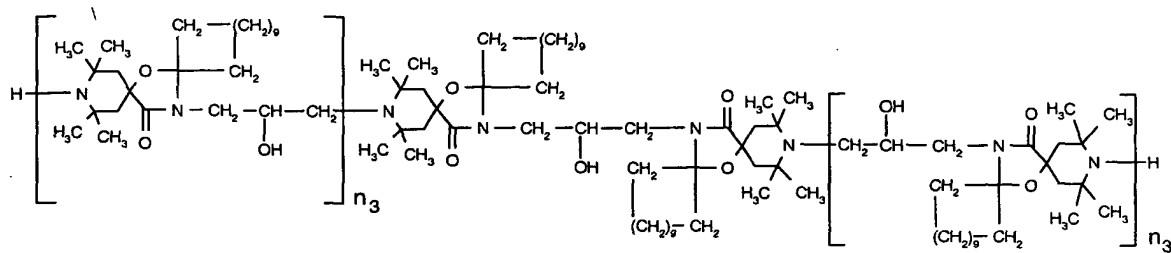
in which  $\text{R}_{32}$  has one of the meanings of  $\text{R}_6$ ;



wherein  $n_1$  is a number from 2 to 20;

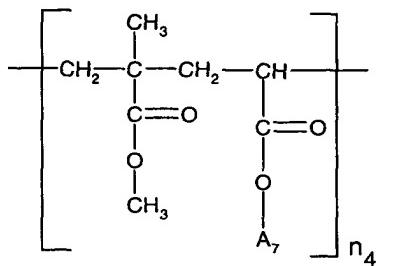


wherein  $n_2$  and  $n_2^*$  are a number from 2 to 20;



(B-9-a)

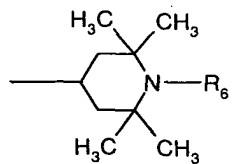
wherein the variables  $n_3$  independently of one another are a number from 1 to 20;



(B-10-a)

wherein  $n_4$  is a number from 2 to 20, and

at least 50 % of the radicals  $A_7$  are a group of the formula (b-I)



(b-I)

wherein  $R_6$  is hydrogen,  $C_1-C_8$ alkyl,  $O^\cdot$ , -OH,  $-CH_2CN$ ,  $C_1-C_{18}$ alkoxy,  $C_5-C_{12}$ cycloalkoxy,  $C_3-C_6$ alkenyl,  $C_7-C_9$ phenylalkyl unsubstituted or substituted on the phenyl by 1, 2 or 3  $C_1-C_4$ alkyl; or  $C_1-C_8$ acyl,  
and the remaining radicals  $A_7$  are ethyl.

## 12. A stabilizer mixture according to claim 11 wherein

the two different sterically hindered amine compounds of component (I) are

- 1) a compound of the formula (A-1-b) wherein  $E_1$  is hydrogen, and a compound of the formula (B-1-a) wherein  $R_6$  is hydrogen;
- 2) a compound of the formula (B-1-a) wherein  $R_6$  is hydrogen, and a compound of the formula (B-7-a); or

3) a compound of the formula (B-2-a) wherein R<sub>13</sub> is methyl, and a compound of the formula (B-7-a).

**13.** A stabilizer mixture according to claim 2 wherein E<sub>1</sub>, E<sub>8</sub>, E<sub>12</sub>, E<sub>13</sub>, E<sub>16</sub>, E<sub>18</sub>, E<sub>22</sub>, E<sub>23</sub>, E<sub>25</sub>, E<sub>29</sub>, R<sub>6</sub>, R<sub>13</sub>, R<sub>16</sub>, R<sub>18</sub>, R<sub>30</sub> and R<sub>32</sub> are hydrogen, C<sub>1</sub>-C<sub>4</sub>alkyl, C<sub>1</sub>-C<sub>10</sub>alkoxy, cyclohexyloxy, allyl, benzyl or acetyl.

**14.** A stabilizer mixture according to claim 11 wherein E<sub>1</sub>, E<sub>8</sub>, E<sub>12</sub>, E<sub>13</sub>, E<sub>16</sub>, E<sub>18</sub>, E<sub>22</sub>, E<sub>23</sub>, E<sub>25</sub>, E<sub>29</sub>, R<sub>6</sub>, R<sub>13</sub>, R<sub>16</sub>, R<sub>18</sub>, R<sub>30</sub> and R<sub>32</sub> are hydrogen or methyl and E<sub>1</sub> and R<sub>6</sub> additionally are C<sub>1</sub>-C<sub>8</sub>alkoxy.

**15.** A stabilizer mixture according to claim 1, wherein the compound of component (II) is selected from the group consisting of Mg carboxylates, Zn carboxylates, Mg oxides, Zn oxides, Mg hydroxides, Zn hydroxides, Mg carbonates and Zn carbonates.

**16.** A stabilizer mixture according to claim 1, which additionally contains as a further component

- (X-1) a pigment or
- (X-2) an UV absorber or
- (X-3) a pigment and an UV absorber.

**17.** A stabilizer mixture according to claim 1, which additionally contains as a further component

- (XX) an organic salt of Ca, an inorganic salt of Ca, Ca oxide or Ca hydroxide.

**18.** A composition comprising an organic material subject to degradation induced by light, heat or oxidation and a stabilizer mixture according to claim 1.

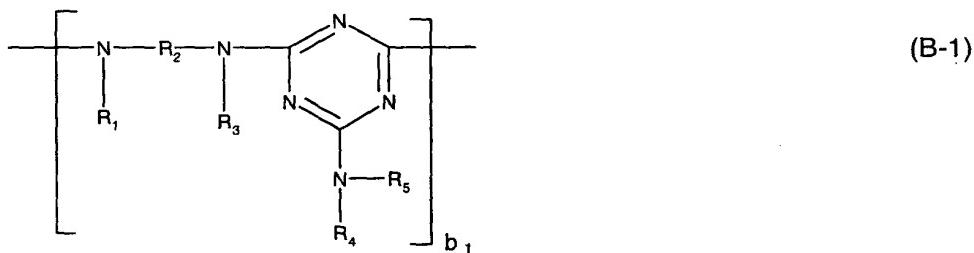
**19.** A composition according to claim 18 wherein the organic material is a synthetic polymer.

**20.** A composition according to claim 18 wherein the organic material is a polyolefin.

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21. A composition according to claim 18 wherein the organic material is polyethylene, polypropylene, a polyethylene copolymer or a polypropylene copolymer.

22. Polypropylene containing a compound of the formula (B-1), a compound of the formula (B-7) and a Zn-carboxylate;



in which

$\text{R}_1$ ,  $\text{R}_3$ ,  $\text{R}_4$  and  $\text{R}_5$  independently of one another are hydrogen,  $\text{C}_1\text{-}\text{C}_{12}$ alkyl,  $\text{C}_5\text{-}\text{C}_{12}$ cycloalkyl,  $\text{C}_1\text{-}\text{C}_4$ -alkyl-substituted  $\text{C}_5\text{-}\text{C}_{12}$ cycloalkyl, phenyl, phenyl which is substituted by -OH and/or  $\text{C}_1\text{-}\text{C}_{10}$ alkyl;  $\text{C}_7\text{-}\text{C}_9$ phenylalkyl,  $\text{C}_7\text{-}\text{C}_9$ phenylalkyl which is substituted on the phenyl radical by -OH and/or  $\text{C}_1\text{-}\text{C}_{10}$ alkyl; or a group of the formula (b-I)



$\text{R}_2$  is  $\text{C}_2\text{-}\text{C}_{18}$ alkylene,  $\text{C}_5\text{-}\text{C}_7$ cycloalkylene or  $\text{C}_1\text{-}\text{C}_4$ alkylenedi( $\text{B}_5\text{-}\text{C}_7$ cycloalkylene),

or

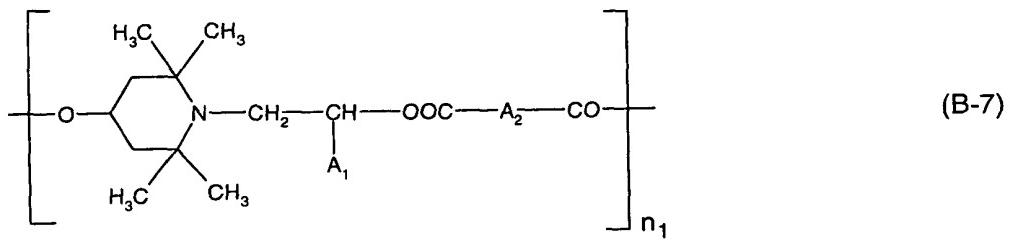
the radicals  $\text{R}_1$ ,  $\text{R}_2$  and  $\text{R}_3$ , together with the nitrogen atoms to which they are bonded, perform a 5- to 10-membered heterocyclic ring, or

$\text{R}_4$  and  $\text{R}_5$ , together with the nitrogen atom to which they are bonded, form a 5- to 10-membered heterocyclic ring,

$\text{R}_6$  is hydrogen,  $\text{C}_1\text{-}\text{C}_8$ alkyl, O<sup>-</sup>, -OH, - $\text{CH}_2\text{CN}$ ,  $\text{C}_1\text{-}\text{C}_{18}$ alkoxy,  $\text{C}_5\text{-}\text{C}_{12}$ cycloalkoxy,  $\text{C}_3\text{-}\text{C}_6$ alkenyl,  $\text{C}_7\text{-}\text{C}_9$ phenylalkyl unsubstituted or substituted on the phenyl by 1, 2 or 3  $\text{C}_1\text{-}\text{C}_4$ alkyl; or  $\text{C}_1\text{-}\text{C}_8$ acyl, and

$\text{b}_1$  is a number from 2 to 50,

with the proviso that at least one of the radicals  $\text{R}_1$ ,  $\text{R}_3$ ,  $\text{R}_4$  and  $\text{R}_5$  is a group of the formula (b-I);



wherein A<sub>1</sub> is hydrogen or C<sub>1</sub>-C<sub>4</sub>alkyl,  
 A<sub>2</sub> is a direct bond or C<sub>1</sub>-C<sub>10</sub>alkylene, and  
 n<sub>1</sub> is a number from 2 to 50.

**23.** A method for stabilizing an organic material against degradation induced by light, heat or oxidation, which comprises incorporating into the organic material a stabilizer mixture according to claim 1.